

DOI Climate Science Centers – Review and Status of Establishment of the Northeast Climate Science Center:

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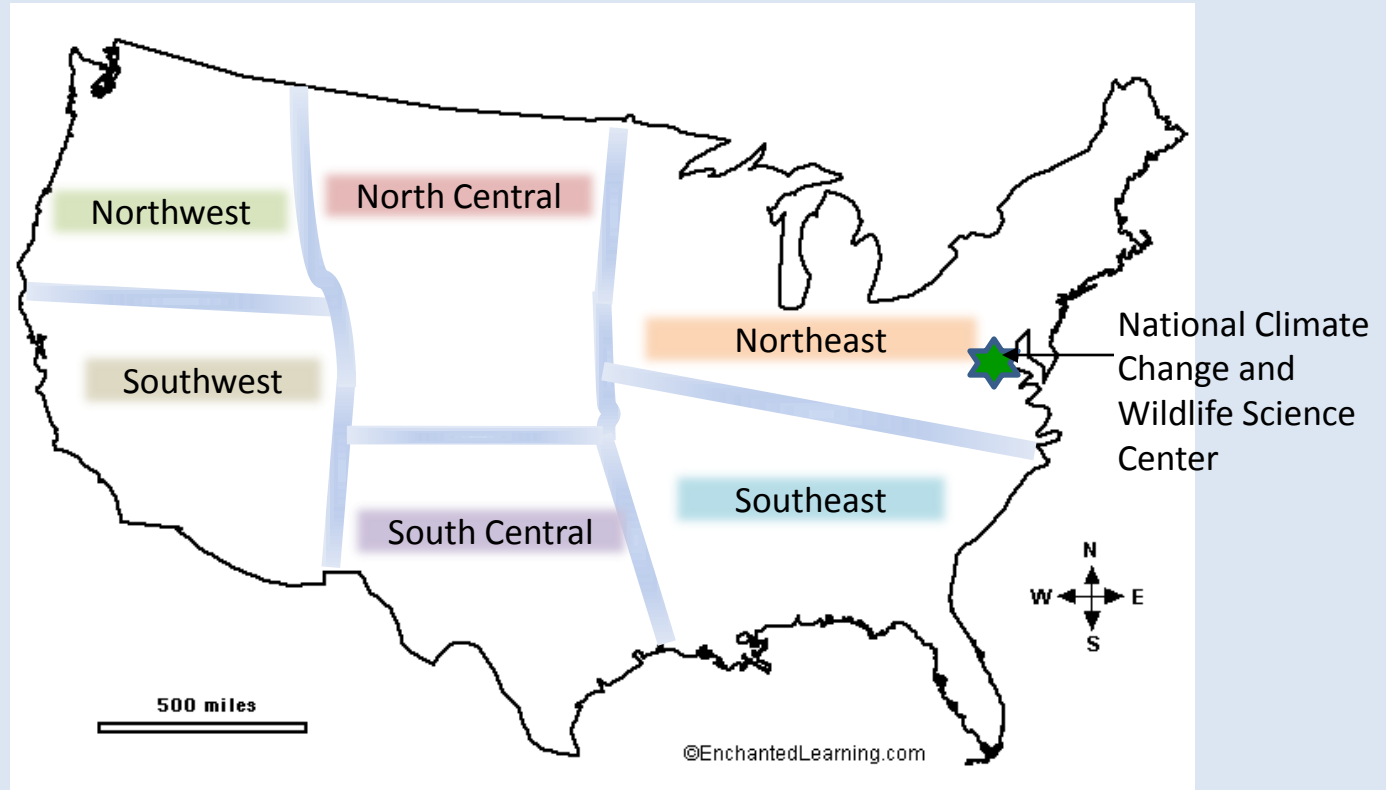
Secretarial Order 3289

Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources (9/14/09)

- Department-wide Climate Change Response Council
- Landscape Conservation Cooperatives
- Regional Climate Science Centers
- Carbon Sequestration (biological, geological)
- DOI's Carbon Footprint
- National Climate Change and Wildlife Science Center



Climate Science Centers--Regions



“Fuzzy Boundaries”

**“Big Science” or “Pure Science”
atmospheric, ecological, geologic, hydrologic**



Translation, Integration, Assessment



Application to Management Concerns

Connecting Climate Change to Resource Management

Global Climate Models

Describe likely climate changes at a very large scale
Produced by agencies, universities, and research centers

Local / Regional Climate Information

Describe likely climate changes at a regional or local scale. Downscaled from global models or produced from regional models.

Ecological Understanding

Describe basic ecological processes (hydrology, population biology, ecosystem functions, processes, and services)

Forecasts of Ecological Response

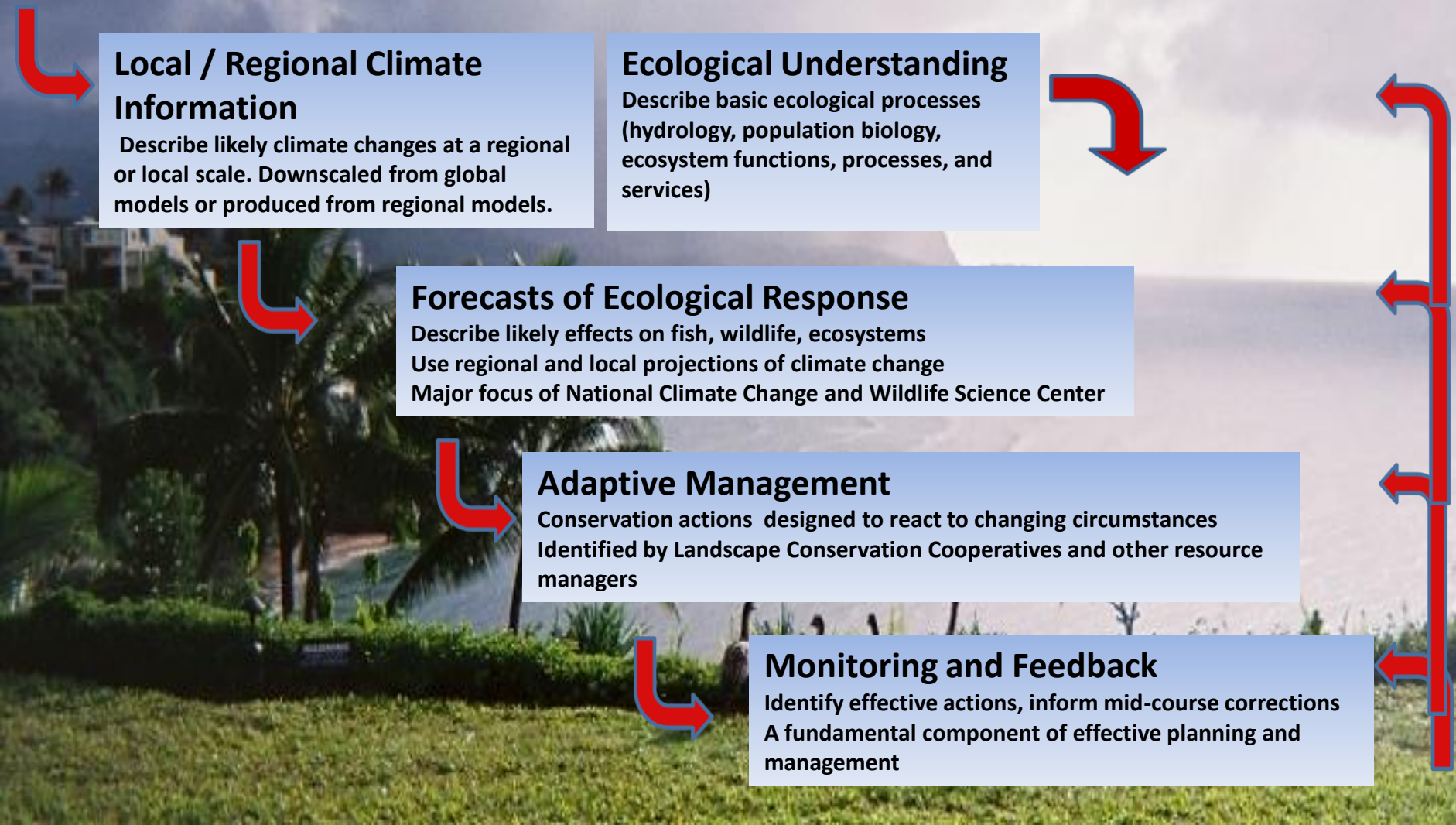
Describe likely effects on fish, wildlife, ecosystems
Use regional and local projections of climate change
Major focus of National Climate Change and Wildlife Science Center

Adaptive Management

Conservation actions designed to react to changing circumstances
Identified by Landscape Conservation Cooperatives and other resource managers

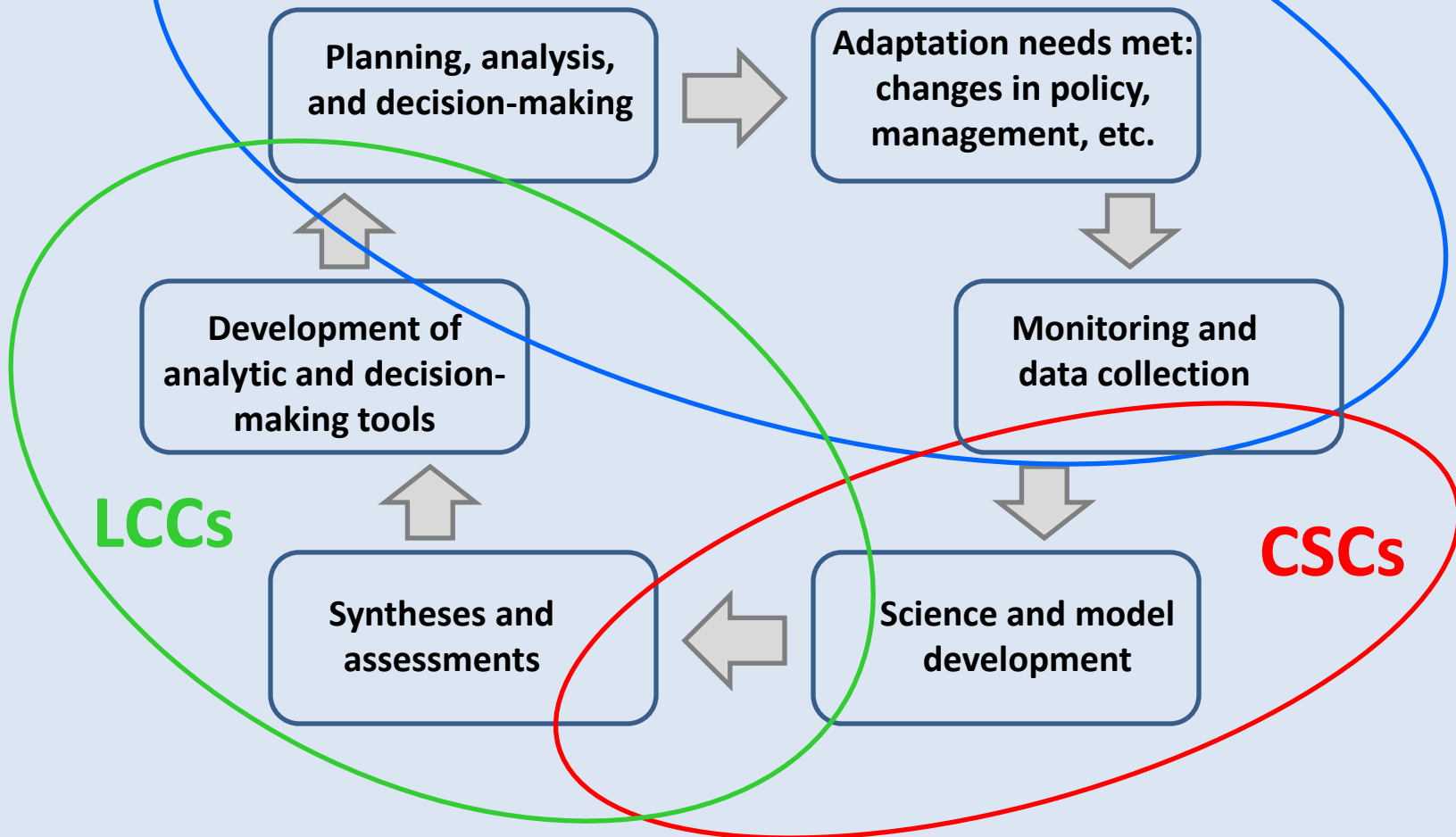
Monitoring and Feedback

Identify effective actions, inform mid-course corrections
A fundamental component of effective planning and management



Climate Change Adaptation Conceptual Model

Agencies, states, local governments,
tribes, NGOs, & private landowners



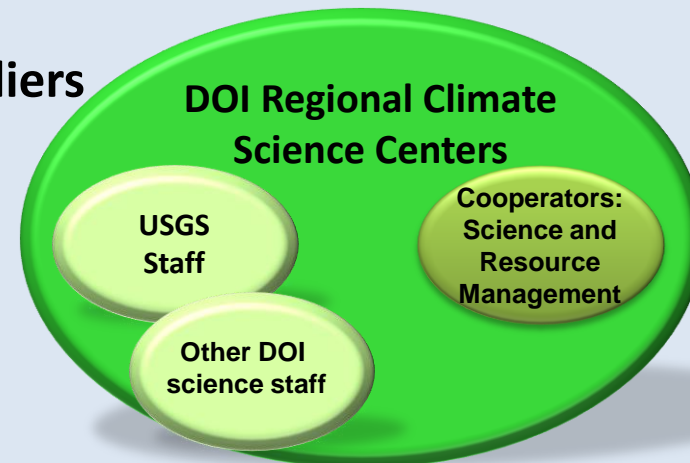
National Climate Change & Wildlife Science Center

Priority Science Activities:

- Integrate physical climate models with ecological, habitat, and population response models**
- Develop models and forecast fish and wildlife population and habitat changes**
- Develop methods and assess vulnerability of species and habitats**
- Develop standardized approaches to modeling and monitoring**

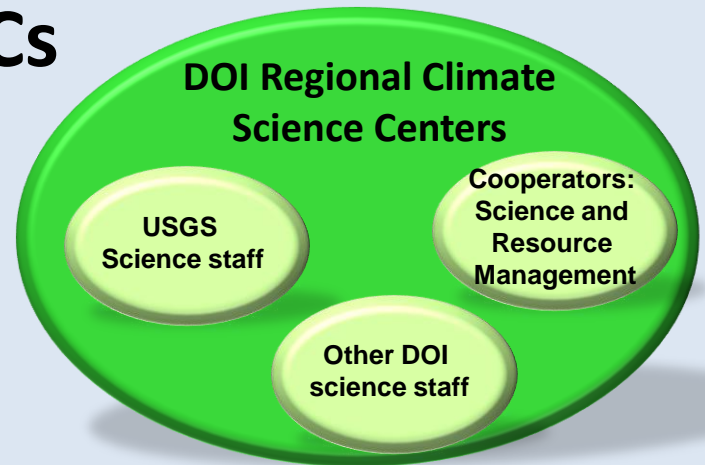
USGS NCCWSC Component of DOI Regional CSCs

- Initial / Core Federal Staffing (USGS NCCWSC) – Director/Coordinator, Ecologists, Modelers, Climate Scientists, Population Biologists, etc.
- Annual DOI/USGS funding ~\$3-4 million
 - Not more than \$1.5 M = DOI staff and operations (space/facilities, etc.)
 - Remainder = science funding through university, USGS, other partners
 - Partnerships – in-kind and monetary multipliers



Establishing DOI Regional CSCs

- University / Nonfederal Based
- Competitive Process
- FY 2010 – Northwest – OSU/UW/UI
Southeast – NC State
Alaska – UAF (at UAA)
- FY 2011 – Southwest, North Central
- FY 2012 – Northeast, South Central, Pacific



Climate Science Centers

Potentially most valuable role?

Convener of the parties

USERS with NEEDS

(management
community
convened
by LCCs)



Regional CSC



SCIENTISTS with

CAPABILITIES

(USGS, host
university, other
feds, etc.)



Regional Science Agenda

Status of NE Climate Science Center

- Announcement Requesting Proposals – February 28, 2011
- Proposals due – May 6, 2011
- Review by DOI Agency Committee June, 2011
- Decision – no later than September, 2011,
- Start up – as soon as possible with acting Director and development of steering committee

Thank you

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National Climate Change & Wildlife Science Center

Mission

Provide **natural resource managers** with the **tools and information** they need to **develop and execute management strategies** that address the impacts of **climate change on fish, wildlife, and their habitats**

Goals

- Partnerships with natural resource managers to address their highest priority science needs
- Partnerships with the scientific community to develop needed information and tools
- Delivery of robust tools and information at applicable scales directly to resource managers

Focus on climate change adaptation

Focus on climate change in context of other actions/stresses, etc.